What is claimed is:

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meniscus lens.

	what is claimed is.	
1	1.	A device for controlling light transmission, comprising:
2		a mixture comprising a fluid material and a photochromic dyestuff material;
3		and
4		a medium for carrying said mixture, wherein said mixture varies between a
5		first condition and a second condition, said first condition letting substantially all
6		light pass through said mixture, and said second condition absorbing light passing
7	,	through said mixture.
1	2.	The device according to claim 1, wherein said fluid material is a liquid crystal
2		material.
1	3.	The device according to claim 2, wherein said conditions are passively reversible.
1	4.	The device according to claim 2, wherein increasing exposure to ultraviolet light
2		forces said mixture toward said second condition.
1	5.	The device according to claim 2, wherein decreasing exposure to ultraviolet light
2		forces said mixture toward said first condition.
1	6.	The device according to claim 2, wherein said conditions are actively reversible.
1	7.	The device according to claim 2, wherein said medium comprises:
2		a pair of opposed substrates having a gap therebetween for receiving said
3		mixture; and
4		a frame for holding said pair of substrates adjacent one another.
1	8.	The device according to claim 7, wherein each said substrate has an alignment layer
2		contacting said mixture.
1	9	The device according to claim 7, wherein at least one of said substrates is a

3	10.	The device according to claim 1, wherein said medium comprises a polymer film,
4		wherein said mixture is dispersed through said film, and wherein said mixture
5		includes a liquid crystal material.
1	11.	The device according to claim 1, wherein said medium comprises:
2		a pair of opposed substrates having a gap therebetween for receiving said
3		mixture;
4		an alignment layer disposed on at least one said substrate facing said gap;
5		and
6		a sealant capturing said mixture between said substrates.
1	12.	The device according to claim 11, wherein said fluid is a liquid crystal material.
1 2	13.	The device according to claim 11, wherein said fluid is a chiral nematic liquid crystal material.
1	14.	The device according to claim 11, further comprising:
2		an electrode disposed on each said substrate facing said gap; and
3		an electric power source connected to each said electrode, said electric power
4		source generating an electric field that controls the variation between said first and
5		second conditions.
1	15.	The device according to claim 14, wherein application of the electric field controls
2		an angle of said fluid material with respect to said substrate which, in turn, controls
3		the orientation of said photochromic dyestuff material.
1	16.	The device according to claim 14, wherein exposure to ultraviolet light forces said
2		mixture toward said second condition.
1	17.	The device according to claim 16, wherein application of said electric field forces
2		acid miviture healt toward said first condition

1	18.	The device according to claim 16, wherein said second condition absorbs visible
2		light and polarization components substantially perpendicular to said alignment
3		layer, and wherein application of said electric field increase absorption of visible
4		light while absorption of the polarization components decrease.
1	19.	The device according to claim 16, wherein said second condition absorbs visible
2		light, but not any polarization components when said electric field is applied.
1	20.	A device for exhibiting variable transparency, comprising:
2		a pair of opposed substrates positioned adjacent one another and having a
3		gap therebetween; and
4		a light sensitive material disposed in said gap, said material selectively
5		absorbing light when exposed to ultraviolet light, and said material allowing
6		substantial transmission of light when exposure to ultraviolet light is removed.
1	21.	The device according to claim 20, wherein said material is a polymer liquid crystal
2		material.
1	22.	The device according to claim 20, wherein said material is a mixture of a fluid
2		material and a photochromic dyestuff material.
1	23.	The device according to claim 21, wherein said fluid is a nematic liquid crystal
2		material.
1	24.	The device according to claim 21, wherein said fluid is a chiral nematic liquid
2		crystal material.
1	25.	The device according to claim 23, wherein each said substrate has an alignment
2		layer adjacent said gap, wherein both said alignment layers are uniaxially aligned.
1	26.	The device according to claim 23, further comprising a frame for carrying said

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substrates.

3	27.	The device according to claim 23, wherein at least one of said substrates is a corrective lens.
1 2	28.	The device according to claim 23, wherein the amount of light absorption and light polarization is dependent upon the amount of ultraviolet light exposure.
1 2	29.	The device according to claim 20, wherein said photochromic dyestuff material is at a concentration in the range of 0.1% to 10% weight of said fluid material.
1 2 3 4 5	30.	A device for controlling light transmission, comprising: a film carrying a mixture of at least a nematic liquid crystal material and a photochromic dyestuff material, said mixture selectively polarizing and absorbing light when exposed to ultraviolet light and said material allowing substantial transmission of light when exposure to ultraviolet light is removed.
1 2 3	31.	The device according to claim 30, wherein said film is formed by a phase separation process selected from the group consisting of thermally induced, solvent induced, and polymerization induced.
1 2	32.	The device according to claim 30, further comprising a substrate for carrying said film.
1	33.	The device according to claim 32, wherein said substrate is a corrective lens.
1 2	34.	The device according to claim 30, wherein said film is formed from a nematic polymeric material with the dyestuff material orientationally ordered.